

PTO/SB/08A (08-03)

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet 1

of 5

**Complete if Known**

Application Number	10/678,438
Filing Date	3 October 2003
First Named Inventor	Vladimir V. MAKAROV
Art Unit	
Examiner Name	
Attorney Docket Number	65.0395

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
SA		US- 5,840,630	11-24-1998	Cecere et al.	
		US- 6,514,866 B2	02-04-2003	Russell et al.	
		US- 2003/0060048 A1	03-27-2003	Russell et al.	
		US- 2003/0038113 A1	02-27-2003	Makarov et al.	
		US- 6,407,001 B1	06-18-2002	Scott	
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		US- 5,851,413	12-22-1998	Casella et al.	
✓		US- 5,899,740	05-04-1999	Kwon	
SA		US- 5,959,358	09-28-1999	Lanford et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>2</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
SA		JP2295117	12-06-1990	NTT ✓		✓
SA		JP4173988	11-02-1990	Nissin Electric ✓		✓

Examiner  
Signature

Shamim Ahmed

Date  
Considered

6/22/05

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Sheet 2

of 5

Attorney Docket Number

65.0395

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First Named Inventor	Vladimir V. MAKAROV
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### Art Unit

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Attorney Docket Number	65.0395
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## U. S. PATENT DOCUMENTS

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Signature**

Shamim Ahmed

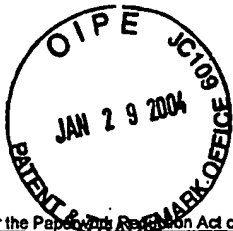
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Attorney Docket Number	65.0395

Sheet 3 of 5

**NON PATENT LITERATURE DOCUMENTS**

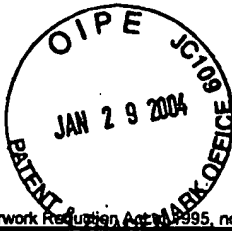
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
SA		S. Herschbein et al., The Challenges of FIB Chip Repair & Debug Assistance in the 0.25 um Copper Interconnect Millenium, Proceedings from 24th International Symposium for Testing and Failure Analysis, 15-19 November 1998, Dallas, Texas, pp.127-130	
		J. Phillips et al., Channeling effects during focused-ion-beam micromachining of copper, J. Vac. Sci. Technol. A 18(4), Jul/Aug 2000, pp.1061-1065	
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		H. Bender et al., Investigation on the Corrosion of Cu Metallization in the Focused Ion Beam System due to a low I2 Background, Proceedings from the 25th International Symposium for Testing and Failure Analysis, 1999, pp. 135-140.	
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		P. Ho et al., Overview on Low Dielectric Constant Materials for IC Applications, in Low Dielectric Constant Materials for IC Applications, Ed. by P. Ho et al., Springer-Verlag, Berlin, Heidelberg 2003, Chapter I, pp. 1-21	
SA		J. Gonzalez et al., Chemically enhanced focused ion beam micromachining of copper, J. Vac. Sci. Technol. B 19(6), Nov/Dec 2001, pp. 2539-2542	

Examiner Signature	Shamim Ahmed	Date Considered	6/22/05
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First Named Inventor	Vladimir V. MAKAROV
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Sheet 4

of 5

**NON PATENT LITERATURE DOCUMENTS**

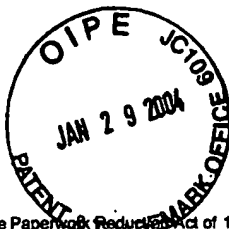
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
SA		J. Gonzalez et al, Improvements in Focused Ion Beam Micro-machining of Interconnect Materials, J. Vac. Sci. Technol. B20(6), Nov/Dec 2002, pp. 2700-2704	
		L. Harriott, Digital scan model for focused ion beam induced gas etching, J. Vac. Sci. Technol. B 11(6), Nov/Dec 1993, pp. 2012-2015	
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✓		S. Pauthner, Device modification and gass assisted etching on Cu-samples, 3rd European FIB Users Group Meeting (EFUG99) Abstracts 4 October 1999 (1 paragraph abstract of 8-page document)	
SA		2-Nitroethanol Material Safety Data Sheet, Aldrich Chemical Co., Inc., valid 02/2003-04/2003, (four pages)	

Examiner Signature	Shamim Ahmed	Date Considered	6/22/05
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Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
SA		N. Goldblatt et al., Unique and Practical IC Timing Analysis Tool Utilizing Intrinsic Photon Emission, Microelectronics Reliability Conference, 2001, 41(9-10): 1507-1512 ✓	
		D. Knebel et al., Diagnosis and Characterization of Timing-Related Defects by Time-Dependent Light Emission, IEEE International Test Conference, 1998, pp. 733-739 ✓	
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		T. Lundquist et al., Characterize Gate-Level Transistor Performance with PICA, Semiconductor International, 2001, 4 pages ✓	
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Examiner Signature	Shamin Ahmed	Date Considered	6/22/05
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